Environmental Protection Agency

 $[67~{\rm FR}~17773,~{\rm Apr.}~11,~2002,~{\rm as}~{\rm amended}~{\rm at}~70~{\rm FR}~6942~{\rm and}~6952,~{\rm Feb.}~9,~2005]$

Table 18 to Subpart UUU of Part 63—Requirements for Performance Tests for Organic HAP Emissions From Catalytic Reforming Units

As stated in $\S63.1566(b)(2)$ and (3), you shall meet each requirement in the following table that applies to you.

For each new or exiting catalytic reforming unit	You must	Using	According to these requirements
1. Option 1: Vent to a flare	a. Conduct visible emission observations.	Method 22 (40 CFR part 60, appendix A).	2-hour observation period. Record the presence of a flame at the pilot light over the full period of the test.
	 b. Determine that the flare meets the requirements for net heating value of the gas being combusted and exit velocity. 	Not applicable.	40 CFR 63.11(b)(6) through (8).
Option 2: Percent reduction or concentration limit.	a. Select sampling site	Method 1 or 1A (40 CFR part 60, appendix A). No tra- erse site selection method is needed for vents smaller than 0.10 meter in diameter.	Sampling sites must be lo- cated at the inlet (if you elect the emission reductio standard) and outlet of the control device and prior to any releases to the atmos- phere.
	Measure gas volumetric flow rate.	Method 2, 2A, 2C, 2D, 2F, or 2G (40 CFR part 60, appendix A), as applicable.	
	c. Measure TOC concentra- tion (for percent reduction standard).	Method 25 (40 part 60, appendix A) to measure nonmethane TOC concentration (in carbon equivalents) at inlet and outlet of the control device. If the nonmethane TOC outlet concentration is expected to be less than 50 ppm (as carbon), you can use Method 25A to measure TOC concentration (as hexane) at the inlet and the outlet of the control device. If you use Method 25A, you may use Method 25A, you may use Method 18 (40 CFR part 60, appendix A) to measure the methane concentration to determine the nonmethane TOC concentration.	Take either an integrated sample or four grab samples during each run. If you use a grab sampling technique, take the samples at approximately equal intervals in time, such as 15-minute intervals during the run.
	 d. Calculate TOC or non- methane TOC emission rate and mass emission re- duction. 		Calculate emission rate by Equation 1 of §63.1566 (if you use Method 25) or Equation 2 of §63.1566 (if you use Method 25A). Calculate mass emission reduction by Equation 3 of §63.1566.
	e. For concentration standard, measure TOC concentration. (Optional: Measure methane concentration.)	Method 25A (40 CFR part 60, appendix A) to measure TOC concentration (as hexane) at the outlet of the control device. You may elect to use Method 18 (40 CFR part 60, appendix A) to measure the methane concentration.	
	f. Determine oxygen content in the gas stream at the outlet of the control device.	Method 3A or 3B (40 CFR part 60, appendix A), as applicable.	

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For each new or exiting catalytic reforming unit	You must	Using	According to these requirements
	g. Calculate the TOC or non- methane TOC concentra- tion corrected for oxygen content (for concentration standard).	Equation 4 of § 63.1566.	
	h. Establish each operating limit in Table 16 of this sub-part that applies to you for a thermal incinerator, or process heater or boiler with a design heat input capacity under 44 MW, or process heater or boiler in which all vent streams are not introduced into flame zone.	Data from the continuous parameter monitoring systems.	Collect the temperature moni- toring data every 15 min- utes during the entire pe- riod of the initial TOC per- formance test. Determine and record the minimum hourly average combustion zone temperature.
	i. If you do not use a control device, document the purging conditions used prior to testing following the minimum requirements in the operation, maintenance, and monitoring plan.	Data from monitoring systems as identified in the oper- ation, maintenance, and monitoring plan.	Procedures in the operation, maintenance, and moni- toring plan.

[67 FR 17773, Apr. 11, 2002, as amended at 70 FR 6942 and 6952, Feb. 9, 2005]

TABLE 19 TO SUBPART UUU OF PART 63—INITIAL COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

As stated in 63.1566(b)(7), you shall meet each requirement in the following table that applies to you.

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For each applicable proc- ess vent for a new or ex- isting catalytic reforming unit	For the following emission limit	You have demonstrated initial compliance if		
Option 1	Visible emissions from a flare must not exceed a total of 5 minutes during any 2 consecutive hours.	Visible emissions, measured using Method 22 over the 2-hour observation period of the performance test, do not exceed a total of 5 minutes.		
Option 2	Reduce uncontrolled emissions of total organic compounds (TOC) or nonmethane TOC from your process vent by 98 percent by weight using a control device or to a concentration of 20 ppmv (dry basis as hexane), corrected to 3 percent oxygen, whichever is less stringent.	The mass emission reduction of nonmethane TOC measured by Method 25 over the period of the performance test is at least 98 percent by weight as calculated using Equations 1 and 3 of § 63.1566; or the mass emission reduction of TOC measured by Method 25A (or nonmethane TOC measured by Methods 25A and 18) over the period of the performance test is at least 98 percent by weight as calculated using Equations 2 and 3 of § 63.1566; or the TOC concentration measured by Method 25A (or the nonmethane TOC concentration measured by Methods 25A and 18) over the period of the performance test does not exceed 20 ppmv (dry basis as hexane) corrected to 3 percent oxygen as calculated using Equation 4 of § 63.1566.		

[70 FR 6953, Feb. 9, 2005]

TABLE 20 TO SUBPART UUU OF PART 63—CONTINUOUS COMPLIANCE WITH ORGANIC HAP EMISSION LIMITS FOR CATALYTIC REFORMING UNITS

As stated in 63.1566(c)(1), you shall meet each requirement in the following table that applies to you.